



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Division of Air Pollution Control--Field Operations Section

MEMORANDUM

DATE: April 29, 1987 Date of Inspection: April 13, 1987
TO: M. Zamco-APC-Spfld Last Insp. Date: July 18, 1986
FROM: R. Jennings/W. Kahila Region/District: II/201
SUBJECT: Facility: Allied Iron and Steel Co. I.D. #: 143 065 ALY
Address: 2900 W. Clarke, Peoria, Illinois 61607
Contact/Title: See below Phone: 309/637-7756

PRE-INVESTIGATION STATUS: Other - (J) Special Request
INSPECTION FINDINGS: No Violation - TAS Checked
Form 177

Persons contacted:
John Miller - Mgr.
Harold Miller - Owner

Persons doing inspection:
Wayne Kahila - IEPA - DAPC
John Tripses - IEPA - DLPC
Andrew Miles - Radian Corp.

This facility is a scrap metal yard that mostly handles automobiles in a shredder. It also has a copper wire incinerator that burns insulation off the wires in order to recover the copper.

The purpose of this inspection was to take samples of ash from the incinerator in order to analyze the samples for dioxin contamination. Andrew Miles took three samples of ash from inside the incinerator and one soil sample from about four feet from the incinerator. The samples were taken on April 13, 1987.

John Miller said that they get wire from individuals such as electricians who may have got some old wire from remodeling jobs. This facility also burns some electric motors to recover the copper. No transformers have ever been handled. The incinerator is operated about 15 to 20 times per year. The last time it was operated was February 18, 1987.

There was no wire on site on the day of this inspection. A. Miller and Co. has another site in Peoria where the wire is collected. No incineration is done at this second site. We went to this second site, A. Miller and Co., 1612 S.W. Adams St., Peoria, IL 61602, and talked to Harold Miller. We saw a small pile of wire that will be sent to the Clarke Street site for incineration. This wire was various sizes from about #14 to #1.

The Incineration Inspection Report Form is attached. Photos attached.

WOK/lb
0136F

cc:-J. Tripses W. Kahila
-D. Hayden J. Benson
-ID #143 065 ALY (all w/attachment)

EPA Region 5 Records Ctr.



288670

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
INCINERATOR INSPECTION REPORT

INCINERATOR NO LONGER IN USE ☐
INCINERATOR HAS BEEN DISMANTLED ☐
DATE APRIL 13, 1987 DISPOSITION _____

Incinerator was shut down on: Date _____
Checklist needs to be filled out as much as possible for shut down facility. P. 1 of _____ PP.

AGENCY IDENTIFICATION CODES

LPC SITE NO.	APC ID NO. <u>143065 ALY</u>
LPC DEVELOPMENT NO.	APC CONSTRUCTION PERMIT NO.
LPC OPERATING PERMIT NO.	APC OPERATING PERMIT NO. <u>80010078</u>
	TAS SOURCE NO.

UNIT IDENTIFICATION

COMPANY NAME <u>ALLIED IRON AND STEEL CO.</u>	PERSON CONTACTED <u>JOHN MILLER</u>
LOCATION ADDRESS <u>2900 W. CLARKE ST.</u>	TITLE <u>MANAGER</u>
CITY & ZIP CODE <u>PEORIA, IL 61602</u>	TELEPHONE <u>309 637 7756</u>

RCRA STATUS SUMMARY

IS THIS INCINERATOR SUBJECT TO RCRA? <input type="radio"/> YES <input checked="" type="radio"/> NO <input type="radio"/> ?	HAS A RCRA PART "A" APPLICATION BEEN FILED? <input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> ?
DOES THIS FACILITY GENERATE A RCRA LISTED WASTE? <input type="radio"/> YES <input type="radio"/> NO	WHAT OPTIONS ARE BEING CONSIDERED TO MEET RCRA INCINERATION REGULATIONS?
PRESENT DISPOSAL METHODS FOR LISTED RCRA WASTES?	
RECYCLE TO _____	AIR POLLUTION CONTROL EQUIPMENT? <input type="radio"/> YES <input type="radio"/> NO
LANDFILL _____	99.99% DRE _____
SPECIFY OTHER _____	0.08 gr/dscf part. @50% E.A. <u>0.025</u>
	99% HCl removal _____
	ALTERNATE DISPOSAL METHODS
INSPECTORS LPC _____ DATE _____	APC _____ DATE _____

ATTACHMENTS

<input type="radio"/> PP. _____ INCINERATOR DESCRIPTION	<input type="radio"/> PP. _____ WASTE ANALYSIS REPORTS
<input type="radio"/> PP. _____ AIR POLLUTION CONTROL EQUIPMENT DESCRIPTION	<input type="radio"/> PP. _____ ANALYSIS OF RESIDUE
<input type="radio"/> PP. _____ MAP OF SENSITIVE POPULATIONS LOCATIONS	<input type="radio"/> PP. _____ PLOT PLAN WITH INCINERATOR LOCATION, BUILDING LOCATIONS & HEIGHT, AND PLANT BOUNDARY
<input type="radio"/> PP. _____ INCINERATOR DRAWINGS	<input type="radio"/> PP. _____ STACK TEST REPORTS
<input type="radio"/> PP. _____ FOS INSPECTION REPORT	<input type="radio"/> PP. _____

ADDITIONAL MATERIALS TO BE RECEIVED

LIST ITEMS AND EXPECTED DATES

INCINERATOR DESCRIPTION

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FUNCTIONAL NAME OF INCINERATOR COPPER WIRE BURNER		
MANUFACTURE EMISSIONS CONTROL CORP.	DATE INSTALLED	MODEL NO. T100
SERIAL NO.		

DESCRIPTION OF INCINERATOR'S OPERATION

IS THIS INCINERATOR CONNECTED DIRECTLY TO ANY MANUFACTURING PROCESS? <input type="radio"/> YES <input checked="" type="radio"/> NO	IF "YES" GIVE THE NAME OF THE PROCESS(ES)
PHYSICAL STATE OF WASTE STREAMS FROM PROCESS(ES)? <input type="radio"/> GAS <input type="radio"/> LIQUID <input type="radio"/> SOLID	
IS INTERIUM STORAGE USED? <input type="radio"/> YES <input type="radio"/> NO	AVERAGE GENERATION RATES
CAPACITY LIQUID _____ GAL. SOLID _____ YDS.	GAS _____ SCFH LIQUID _____ GAL/HR SOLID _____ LB/HR
OTHER WASTE MATERIALS INCINERATED RCRA NO. _____	APC WASTE TYPES BURNED
	GENERAL REFUSE PATHOLOGICAL INDUSTRIAL PROCESS HOSPITAL
	TYPE 0 1 2 3 4 5 GAS/LIQ 6 SOLID 7
	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
	LIST AMOUNT INCINERATED BY TYPE

MEASUREMENTS OF INCINERATOR

BASIC DESIGN <input checked="" type="radio"/> SINGLE CHAMBER <input type="radio"/> MULTIPLE CHAMBER <input type="radio"/> KILN	SHELL CONSTRUCTION <input type="radio"/> BRICK <input checked="" type="radio"/> STEEL SHELL
CHAMBER ARRANGEMENT <input type="radio"/> OTHER <input type="radio"/> INLINE <input type="radio"/> RETORT	MAXIMUM REFRACTORY TEMPERATURE RATING?
PRIMARY COMBUSTION CHAMBER SIZE?	PRIMARY CHAMBER _____ OF SECONDARY CHAMBER _____ OF
HEIGHT _____ FT LENGTH _____ FT WIDTH _____ FT VOLUME _____ FT ³	SECONDARY COMBUSTION CHAMBER SIZE?
HEARTH AREA?	HEIGHT _____ FT LENGTH _____ FT WIDTH _____ FT VOLUME _____ FT ³
_____ FT ² LENGTH _____ FT WIDTH _____ FT	FLAME PORT AREA?
GRATE AREA?	_____ FT ² LENGTH _____ FT WIDTH _____ FT
_____ FT ² LENGTH _____ FT WIDTH _____ FT	DOWN PASS?
AIR WALL PORT AREA?	_____ FT ² LENGTH _____ FT WIDTH _____ FT
_____ FT ² LENGTH _____ FT WIDTH _____ FT	BREECHING AREA?
HORIZONTAL FLOW DISTANCE? _____ FT	_____ FT ² LENGTH _____ FT WIDTH _____ FT
BOTTOM ASH REMOVAL SYSTEM?	TYPE GRATE? <input type="radio"/> FIXED <input type="radio"/> MOVING
<input checked="" type="radio"/> MANUAL <input type="radio"/> SCREW CONVEYER <input type="radio"/> OTHER	ASH PIT VOLUME? _____ YDS
SOLID REFUSE CHARGING METHOD?	SIZE CHARGING VOLUME? _____ FT ³

BURNER SYSTEM

NUMBER OF PRIMARY AUXILIARY FUEL BURNERS? AFTER BURNER 1	MAXIMUM HEAT INPUT CAPACITY OF EACH UNIT? 7 gal/hr 1,000,000 BTU/hr
TYPE FUEL(S) USED? #2 DIESEL	TYPE FUEL OIL ATOMIZATION?
<input type="radio"/> NATURAL GAS <input checked="" type="radio"/> DISTILLATE OIL <input type="radio"/> RESIDUAL OIL	<input type="radio"/> PRESSURE _____ PSIG <input checked="" type="radio"/> AIR _____ PSIG <input type="radio"/> STEAM _____ PSIG
INDIVIDUAL BURNER TURNDOWN-RATIO? OR MODULATION RANGE?	BURNER ALIGNMENT?
	<input type="radio"/> AXIAL <input type="radio"/> OFF-AXIS <input type="radio"/> TANGENTIAL
NUMBER OF SECONDARY AUXILIARY FUEL BURNERS?	MAXIMUM HEAT INPUT OF EACH UNIT?
TYPE FUEL(S) USED?	TYPE FUEL OIL ATOMIZATION?
<input type="radio"/> NATURAL GAS <input type="radio"/> DISTILLATE OIL <input type="radio"/> RESIDUAL OIL	<input type="radio"/> PRESSURE _____ PSIG <input type="radio"/> AIR _____ PSIG <input type="radio"/> STEAM _____ PSIG
INDIVIDUAL BURNER TURNDOWN-RATIO? OR MODULATION RANGE?	BURNER ALIGNMENT?
	<input type="radio"/> AXIAL <input type="radio"/> OFF-AXIS <input type="radio"/> TANGENTIAL
PERCENT OF TOTAL AIR INTRODUCED THROUGH PRIMARY BURNERS?	PERCENT OF TOTAL AIR INTRODUCED THROUGH SECONDARY BURNERS?

LIQUID WASTE INJECTION

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LIQUID WASTE INJECTION RATE _____ GAL/HR	BURNER MFG. _____ MODEL NUMBER _____
TYPE ATOMIZATION <input type="radio"/> INJECTOR <input type="radio"/> ROTARY CUP <input type="radio"/> AIR <input type="radio"/> STEAM	NUMBER OF INJECTORS OR BURNERS & LOCATION (ON AXIS, OFF-AXIS, TANGENTIAL):
LOCATION OF BURNERS _____ IN KILN _____ IN PRIMARY CHAMBER _____ SECONDARY CHAMBER	

AIR POLLUTION EQUIPMENT

TYPE OF CONTROL EQUIPMENT: <input type="radio"/> CYCLONE <input type="radio"/> SCRUBBER <input type="radio"/> BAGHOUSE	SCRUBBER PRESSURE DROP _____ INCHES WATER COLUMN ADJUSTABLE RANGE _____
CYCLONE DIAMETER _____ INCHES NO. OF UNITS _____	SCRUBBENT FLOW RATE _____ GPM
PRESSURE DROP _____ INCHES W.C. AT _____ ACFM	DEMISTER PRESSURE DROP _____ INCHES WATER COLUMN
BAGHOUSE SIZE _____ FT ² FABRIC AREA	PH CONTROL METHOD:
CLEANING METHOD: <input type="radio"/> SHAKER <input type="radio"/> PULSE JET	SCRUBBENT BLOWDOWN RATE _____ GPM
FABRIC _____ MAX. OPERATING TEMPERATURE: _____ F	SCRUBBER SLUDGE DISPOSAL METHOD:
COOLING METHOD:	PARTICULATE REMOVAL: MAX. OPERATION _____ % AVG. OPERATION _____ %
AMOUNT OF QUENCH WATER USED: _____ GAL/1000CF	ACID GAS REMOVAL: MAX. CONTROL EFFICIENCY _____ % AVG. CONTROL EFFICIENCY _____ %
FLY ASH DISPOSAL METHOD:	

PRIME MOVER

ENERGY SOURCE: <input type="radio"/> ELECTRIC <input type="radio"/> STEAM	RATED HORSEPOWER OF MOTOR FOR EACH FAN _____
TYPE OF FAN: <input type="radio"/> FORWARD CURVED <input type="radio"/> BACKWARD CURVED	NUMBER OF FANS: _____
FAN MFG: _____ MODEL NUMBER _____	FAN DIAMETER (FT) _____ FAN WIDTH (IN) _____

STACK PARAMETERS

MAIN STACK:	AVG. FLOW <u>1136</u> ACFM AVG. TEMPERATURE <u>205</u> °F
HEIGHT <u>13</u> FT DIAMETER <u>1</u> FT	MAX. FLOW <u>1136</u> ACFM MAX. TEMPERATURE <u>205</u> °F
EMERGENCY STACK:	AVG. FLOW _____ ACFM AVG. TEMPERATURE _____ °F
HEIGHT _____ FT DIAMETER _____ FT	MAX. FLOW _____ ACFM MAX. TEMPERATURE _____ °F

AIR EMISSIONS

AVERAGE PARTICULATE EMISSIONS: <u>0.16</u> LB/HR <u>0.025</u> GR/SCF @ 7% O ₂	MAXIMUM PARTICULATE EMISSIONS: <u>0.16</u> LB/HR <u>0.025</u> GR/SCF @ 7% O ₂
AVERAGE HYDROCHLORIC ACID EMISSIONS _____ LB/HR	MAXIMUM HYDROCHLORIC ACID EMISSIONS _____ LB/HR
AVERAGE HAZARDOUS EMISSIONS:	MAXIMUM HAZARDOUS EMISSIONS:
NAME _____ AMOUNT _____	NAME _____ AMOUNT _____
NAME _____ AMOUNT _____	NAME _____ AMOUNT _____
NAME _____ AMOUNT _____	NAME _____ AMOUNT _____

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<u>STACK MONITORS</u>	<u>MANUFACTURER</u>	<u>MODEL NO.</u>	<u>DATA RECORDED</u>	<u>SET RANGE</u>
OPACITY <input type="radio"/> YES <input checked="" type="radio"/> NO			<input type="radio"/> YES <input type="radio"/> NO	_____ %
OXYGEN <input type="radio"/> YES <input checked="" type="radio"/> NO			<input type="radio"/> YES <input type="radio"/> NO	_____ %
CARBON MONOXIDE <input type="radio"/> YES <input checked="" type="radio"/> NO			<input type="radio"/> YES <input type="radio"/> NO	_____ PPM
TOTAL HYDROCARBON <input type="radio"/> YES <input checked="" type="radio"/> NO			<input type="radio"/> YES <input type="radio"/> NO	_____ PPM
TEMPERATURE:				
PRIMARY CHAMBER <input type="radio"/> YES <input checked="" type="radio"/> NO			<input type="radio"/> YES <input type="radio"/> NO	_____ °F
SECONDARY CHAMBER <input type="radio"/> YES <input checked="" type="radio"/> NO			<input type="radio"/> YES <input type="radio"/> NO	_____ °F
CONTROL EQUIPMENT <input type="radio"/> YES <input checked="" type="radio"/> NO			<input type="radio"/> YES <input type="radio"/> NO	_____ °F
STACK <input type="radio"/> YES <input checked="" type="radio"/> NO			<input type="radio"/> YES <input type="radio"/> NO	_____ °F

INCINERATOR OPERATING CONTROL SYSTEM

IS PRIMARY CHAMBER TEMPERATURE CONTROLLED: O YES O NO	METHOD OF CONTROL: FOLLOW INSTRUCTIONS FROM MANUFACTURER.
IS SECONDARY CHAMBER TEMPERATURE CONTROLLED: O YES O NO	METHOD OF CONTROL:
ARE ALL LIQUID WASTE BURNERS CONTROLLED TO STOP FLOW IF FLAME IS LOST: O YES O NO	IS THE EMERGENCY STACK CONTROLLED TO PREVENT OVER TEMPERATURE IN CONTROL EQUIPMENT: O YES O NO

PERIODIC ANALYSIS OF WASTE & RESIDUE

<u>SOURCE OF SAMPLE</u>	<u>ANALYSIS PROCEDURE</u>	<u>ANALYSIS ON-SITE OFF-SITE</u>	<u>FREQUENCY OF ANALYSIS</u>

INCINERATION OPERATIONS LOGGED

ARE WASTE AMOUNTS RECORDED: <input type="radio"/> YES <input checked="" type="radio"/> NO	WASTES STORED ON-SITE: <input type="radio"/> YES <input checked="" type="radio"/> NO
ARE INCINERATOR PARAMETERS RECORDED: <input type="radio"/> YES <input checked="" type="radio"/> NO	BLENDING ACTIVITY: <input type="radio"/> YES <input checked="" type="radio"/> NO
FREQUENCY INFORMATION IS RECORDED:	IS MAINTENANCE INFORMATION RECORDED: <input type="radio"/> YES <input checked="" type="radio"/> NO

FACILITY EVALUATION

FORMAL PERSONNEL TRAINING PROGRAM: <input type="radio"/> YES <input checked="" type="radio"/> NO <input type="radio"/> SCHEDULED	EMERGENCY CONTINGENCY PLAN AVAILABLE: <input type="radio"/> YES <input checked="" type="radio"/> NO
OPERATING MANUAL AVAILABLE: <input checked="" type="radio"/> YES <input type="radio"/> NO	ON SITE SECURE: <input type="radio"/> YES <input checked="" type="radio"/> NO

WASTE STORAGE FACILITY

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PLEASE SKETCH STORAGE CONTAINER LOCATIONS, SIZE OR AMOUNT, PIPING CONNECTION, PUMPS AND RATE. FEATURES SUCH AS SECONDARY CONTAINMENT AND SEWER DRAINS SHOULD ALSO BE NOTED.

WASTE BLENDING FACILITY

PLEASE SKETCH A FLOW DIAGRAM AND NOTE EQUIPMENT AND PROCEDURES USED TO PRODUCT A BLENDED WASTE FOR THE INCINERATOR. TANK SIZE, MIXER HORSEPOWER, PUMP RATES ETC., SHOULD BE INCLUDED.

WASTE ANALYSIS SUMMARY

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NO.	MATERIAL (DESCRIPTION)	PHASE SOLID LIQ. GAS	HEAT CONT. BTU/LB	SOLID CONT. WT%	VIS. SSU	ASH WT%	CL WT%	RCRA NO. TABLE	DEST.EFF. TABLE	POHC INDEX FORMULA

TYPICAL BOTTOM ASH ANALYSIS

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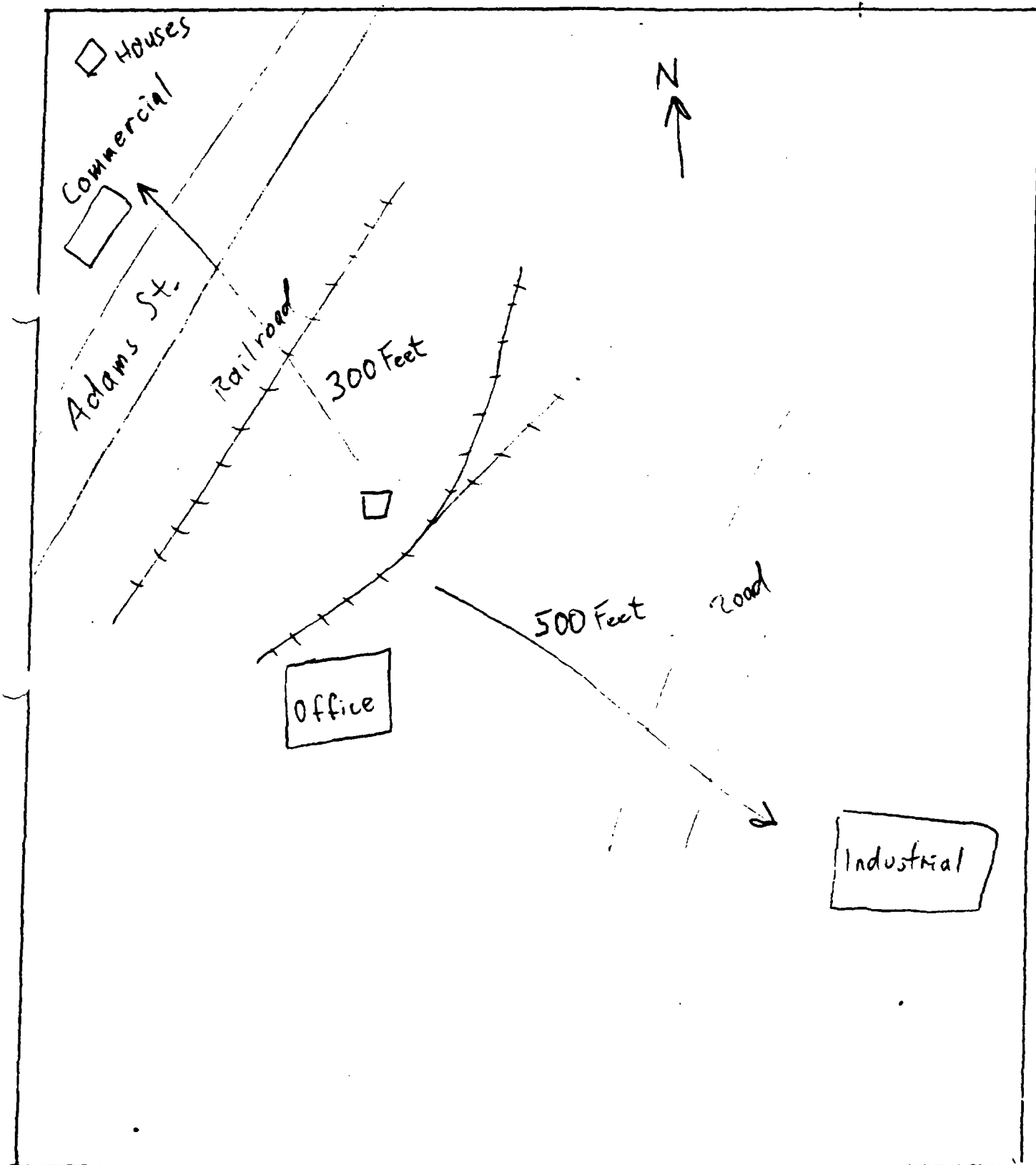
TYPICAL FLY ASH ANALYSIS

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TYPICAL SCRUBBER SLUDGE ANALYSIS

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DIAGRAM OF AREA
(Showing Direction & Distance to Exposed Population)



COMMENTS

ITEM	REMARKS